REMARKS

Claims 1-14 are pending in the application. Claims 1, 3-6 and 8-14 stand rejected under 35 U.S.C. § 102. Claims 2 and 7 stand rejected under 35 U.S.C. § 103(a).

The 35 U.S.C. § 102 Rejections

The Examiner rejected Claims 1, 3-6 and 8-14 under 35 U.S.C. § 102 as being anticipated by United States Patent No. 6,383,170 to Mishima *et al.* ("Mishima"). Applicant respectfully traverses this rejection and requests reconsideration in light of the following remarks.

Claim 1

Regarding claim 1, the Examiner alleges that Mishima teaches an absorbent article as claimed. The Applicant respectfully submits that claim 1 is not anticipated by Mishima for at least the following reasons.

Dual Barrier Cuff Configuration: Second cuff attached to topsheet vs. backsheet

Mishima teaches that the outer barrier cuffs are attached to the topsheet. "Each of the barrier cuffs 9 has its proximal side edge 9b lying immediately outside the associated side edge 4a of the core 4 and joined to the upper surface of the topsheet 2." Mishima, col.2, ll. 63-65. (*See also*, Mishima, Figs. 2 & 4). In contrast, the present claims recite that the second set of vertical cuffs are attached to the *backsheet*, laterally outboard of the absorbent core assembly. "The second set of vertical cuffs are attached to the back sheet on either side of the core assembly." Page 3, lines 17-18. (*See also*, p. 9, ll. 10-11 and Fig. 2). This difference is significant for several reasons.

One particular advantage of this configuration is that by attaching the second vertical cuffs to the backsheet, rather than the topsheet, the barrier properties of the second vertical cuffs are enhanced. The topsheet is made from a liquid permeable

material so that fluid can penetrate to the absorbent core. Once insulted with fluid, the topsheet may remain wet during use. In contrast, the backsheet comprises a liquid impermeable material to provide a barrier between the absorbent core and the outer surface of the absorbent article. Unlike the topsheet, the backsheet material does not retain moisture. In the Mishima design, the topsheet extends all the way to the barrier cuffs, and thus any fluid that enters in the topsheet can also contact the barrier cuffs. Because there is no absorbent material in this region of the garment, the fluid tends to remain in trapped in the topsheet in this region, decreasing wearer comfort and increasing the possibility of leakage. In contrast, the present claims recite attaching the second vertical cuffs to the upper surface of the backsheet, laterally outboard of the topsheet edges, thereby maintaining a physical separation between the barrier cuffs and any moisture retained in the topsheet and the absorbent core assembly. Moreover, by minimizing the amount of permeable material such as the topsheet from between the inner and outer cuffs (*i.e.*, in region R2), fluid that enters this region tends to be absorbed into the core without leaving any residual fluid in the region because there is nothing in the region to hold the fluid.

Another advantage of the claimed invention is that by enhancing the barrier properties of the second vertical cuff as described, the horizontal gasket cuffs are no longer necessary to prevent leakage. Mishima teaches that "[t]he panel 1 also includes a pair of gasket cuffs 12 lying between the transversely opposite edges 1a and the proximal side edges 9b of the barrier cuffs 9. The gasket cuffs 12 are formed with portions of the backsheet 3 extending outward from transversely opposite side edges of the core 4 and outer extensions of the barrier cuffs 9 lying between the proximal side edges 9b of the barrier cuffs 9 and the transversely opposite side edges 1a of panel 1." Mishima, col. 3, ll. 7-14. The Mishima patent reflects the conventional view that the horizontal gasket cuffs are still necessary in addition to the vertical cuffs. In contrast, the present invention does not emphasize the use of such horizontal gaskets, because

they are no longer required (although they may optionally be included). Indeed, the only reference of such gaskets in the present application starts on page 10, line 27: "elastic leg elements. . . may extend along leg openings [of the chassis]." In contrast to previous designs, the double vertical cuff assembly of the present invention is sufficient to prevent leakage.

A third advantage of the claimed invention is that attaching the second vertical cuffs to the backsheet improves manufacturing flexibility. For example, with the present invention, the core assembly, including the topsheet, absorbent core and inner vertical cuffs can be manufactured in one process, while the backsheet and the outer vertical cuffs are manufactured in another process. It is not necessary to attach the topsheet to the backsheet before attaching the outer vertical cuffs.

Open Region Between the Vertical Cuffs: Full vs. partial core utilization

Another distinction between the claimed invention and Mishima relates to the feature of the open region between the vertical cuffs. Mishima teaches an absorbent article with first barrier flaps "extending longitudinally of the panel 1 lying inside the associated one of the transversely opposite side edges 4a of the core 4 and fixed to the upper surface of the topsheet 2." Mishima, col. 3, ll. 37-41. In addition, Mishima teaches a second set of barrier flaps "extending transversely of the panel 1 and fixed to the upper surface of the topsheet." Mishima, col. 3, ll. 41-44. Mishima explains that the objective of the structure is to create a "feces receiving section three-dimensionally defined by a pair of first barrier flaps. . . and a pair of second barrier flaps." Mishima, col. 2, ll. 30-35.

In contrast, the present claims recite a product with a continuously open region (R1) between a first set of vertical cuffs attached to the core assembly. "These cuffs define a containment region that is useful in containing insults, and when necessary, subsequent insults which generally take longer to be absorbed due to a partially

saturated core." Page 4, lines 2-4. When the vertical cuffs are fluid impervious, "fluid entering the first region R1 may be contained between the first set of vertical cuffs (6a, 6b) so that it may be distributed *longitudinally* along the garment, rather than laterally through the first set of vertical cuffs (6a, 6b), to fully utilize the absorbent core 16 from end to end." Page 13, lines 19-23 (emphasis added). Thus, it is an objective of the invention to use the *entire length* of the absorbent core. This is not possible in the Mishima design because the "second set of barrier flaps" actually *prevents* the feces and urine from moving along the full length of the core, thereby *reducing* the core utilization.

In summary, the Applicants believe that the present invention is not anticipated by Mishima for at least the reasons presented above. As such, the Applicants respectfully request reconsideration and allowance of claim 1.

Claims 4-6 and 8-13

Regarding claims 4-6 and 8-13, these claims, either directly or indirectly, depend from claim 1. As discussed above, the Applicants believe that claim 1 is not rendered obvious by Mishima. For the same reasons, the Applicants submit that claims 4-6 and 8-13 are also not anticipated by Mishima, and respectfully request reconsideration and allowance of these claims.

Claims 3 and 14

Claims 3 and 14 recite the additional feature of a topsheet that is partially wrapped around the absorbent core. This feature is shown, for example, in Figure 2 of the present invention. The Applicants respectfully submit that Mashima fails to teach or suggest such a structure. Indeed, in all embodiments, Mishima teaches and shows that the topsheet is *not* wrapped around (*i.e.* tucked under) the absorbent core. For this

additional reason, the Applicants respectfully request reconsideration and allowance of claims 3 and 14.

The 35 U.S.C. § 103 Rejections

The Examiner rejected claims 2 and 7 under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 6,383,170 to Mishima *et al.* in view of United States Patent Nos. 6,120,488 to VanRijswijck *et al.* and 5,613,959 to Roessler *et al.*, respectively. Claims 2 and 7 both depend from claim 1. As discussed above, the Applicants believe that claim 1 is not rendered obvious by Mishima, and for the same reasons, the Applicants respectfully request reconsideration and allowance of claims 2 and 7.

CONCLUSION

For at least the reasons outlined above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and allowance of the pending claims are respectfully solicited. Should there be anything further required to place the application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,
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